

BRIEF DESCRIPTION

Puriphate's bio-beads removes contaminants such as phosphates and nitrates in water through adsorption. The removal of these contaminants minimizes the growth of algae. Algae damages water pumps, ruins the aesthetics of water features, and also affects aquatic life. Water treatment products currently on the market focus on the removal of algae and not the prevention of its growth. Unlike other water treatment products, Puriphate's bio-beads are not caustic or dangerous to humans or other living species. Puriphate's technology is also the only water treatment product that collects the contaminants for extraction, instead of neutralizing them. This creates an opportunity for the repurposing of these extracted chemicals.

MISSION

Be one of the nation's leading innovators and producers of water treatment products and methods. Using our portfolio of technologies, we seek to provide the most efficient, safe, and environmentally responsible water treatment solutions and related products on the market.

TECHNOLOGY

Puriphate's advanced chitosan bio-bead technology maximizes the effect of water filtration systems. Unlike most dangerous chemical-based water treatment solutions, Puriphate's bio-beads are composed of non-toxic, food grade materials that remove up to 99% of phosphates, nitrates, and 96% TOC's. As a result, algae growth, which relies on the presence of these contaminants, is minimized. The bio-beads do not neutralize the contaminants; they attract these negatively charged particles through adsorption. Selenates, humic acids, and colors are also removed with these bio-beads. The bio-beads are placed in a non-stitched filter bag designed for optimal filtration and ease of use.

BUSINESS STRATEGY

Puriphate's technology will be sold to water filtration companies, and water treatment product distributors. Puriphate will have a cyclical revenue model. First, the consumer buys the bag and an initial set of beads from one of our customers. Once used, the beads will be exchanged for a new set of beads at the time of purchase for a discount, the used beads will then be shipped back to Puriphate for regeneration. The valuable extracted chemicals from regeneration are then repurposed and sold to other industries for further use, such as fertilizer manufacturers. Our double revenue model simultaneously minimizes waste and maximizes profits.

MARKET

Puriphate will target the water treatment industry. Puriphate's initial target market will be fresh-water aquariums with secondary markets in recreational waters. 12.3 million households in the U.S. own freshwater fish; approximately \$1.3 billion is spent annually on water treatment for fish tanks. The residential and commercial pool market consists of approximately 10.4 million pools. The average cost of pool maintenance is \$3,000 to \$8000 per year. Puriphate will target other recreational waters like water parks, spas, and Olympic swimming pools.

MANAGEMENT

Puriphate was founded by five students from the University of Houston's Wolff Center for Entrepreneurship in the Bauer College of Business. Dr. Debora Rodrigues is the technology's inventor and Dr. Enrico Nadres is the main technology advisor. Puriphate is seeking the development of a mentor and advisor network of industry experts in water treatment and business.

FINANCIALS

This company is seeking funds to further the development of its products and research. Puriphate's financial plan will be completed upon the finalization of the target market, which will affect the business model.

PURIPHATE
removing impurities one bead at a time.



COMPANY PROFILE:

Industry: Water Treatment
and Distribution
NAICS Code: 221310

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PATENT:

Pending Patent, Awaiting
Approval